

# SASS5 AQUATIC BIOMONITORING TRAINING COURSE

29<sup>th</sup> August – 1<sup>st</sup> September 2016

## Venue:

Africa Enterprise  
1 Nonsuch Road, Montrose  
Pietermaritzburg



## GroundTruth

Water, Wetlands and Environmental Engineering

Offices in KwaZulu-Natal & Western Cape

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www.groundtruth.co.za

## **PRESENTERS**

- Dr Mark Graham (GroundTruth Water, Wetlands and Environmental Engineers)  
Department of Water & Sanitation Accredited Regional KZN SASS5 Auditor  
Co-author of the standard SASS5 method (Dickens & Graham, 2002)  
Developer of the recent WRC SASS5 sampling method video
- Dr Vere Ross-Gillespie (GroundTruth Water, Wetlands and Environmental Engineers)  
Department of Water & Sanitation Accredited SASS5 Practitioner
- Dr Christa Thirion (Department of Water & Sanitation)  
Department of Water & Sanitation - National SASS5 Auditor
- Juan Tedder (GroundTruth Water, Wetlands and Environmental Engineers)  
Department of Water & Sanitation Accredited Provincial KZN SASS5 Auditor

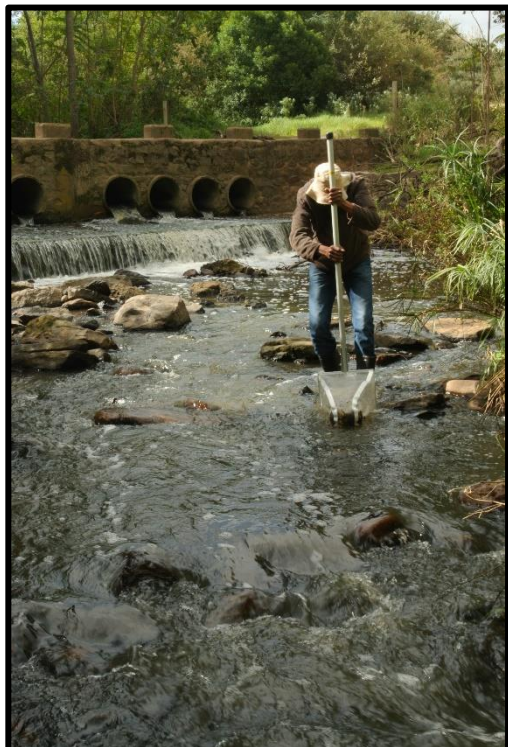
## **COURSE OUTLINE**

The 4 day course (29<sup>th</sup> August – 1<sup>st</sup> September 2016) is designed to provide participants with the basic skills necessary to conduct SASS5 aquatic biomonitoring techniques. The key elements of the training course offered include the following:

- Introduction and overview of biomonitoring
  - Principles, theory, advantages, disadvantages, limitations of the methods. Comparison with classical "wet chemistry" water quality monitoring. Alternative biomonitoring tools/methods. Correct/minimal sampling equipment. Safety associated with field work
  - Aquatic invertebrates. Adaptations to living in water. Sensitivity and adaptation to pollution. Aquatic ecoregions. Preservation of "live" samples - how, when, where. Site selection – characteristics of what constitutes a good aquatic biomonitoring sampling site. Reference and monitoring sites - the key differences and needs of both. Correct/standardised sampling procedures. Overview of using scientific/taxonomic keys. Theory and discussion about preservation of specimen samples. Labelling and curation of samples
- The various major aquatic orders likely to be found in the river systems, i.e. mayflies (Ephemeroptera), caddisflies (Trichoptera), aquatic beetles (Coleopterans), aquatic bugs (Hemipterans), dragonflies and damselflies (Odonata), flies (Dipterans), stoneflies (Plecopterans), and Crustaceans and Molluscs

- The course includes a practical component comprising of comprehensive field work
  - Allocated to the development of identification skill
  - Calculation of SASS indices/metrics
- Data interpretation and reporting
  - Field data (Dallas bands, aquatic ecoregions)
  - Methods and examples of different types of reports and monitoring
- Design of a biomonitoring programme, key principles, frequency of monitoring / reporting
- Understand and selecting reference and monitoring sites
- Requirements for accreditation of practitioners
  - Quality control

**Please note that attending this course does not include or guarantee SASS5 accreditation.**





## COST

The cost of the course will be **R7 400 (excluding VAT)**. This includes all course material, a copy of the latest WRC standard SASS5 biomonitoring DVD, teas and lunches (**excludes accommodation**). All course material as well as all electronic data sheets will be provided, on a memory stick, to all delegates

It is mandatory for delegates attending the course to have their own SASS equipment. This consists of a SASS net, sorting tray, magnifying glass, tweezers and a basic stopwatch. Please arrive with your own equipment otherwise this may be booked and is available at the course at a cost of **R1 698 (excluding VAT)**. We have experienced difficulty in previous courses with delegates not having this basic equipment and unable to fully participate in the practical training. Additional aquatic biomonitoring field resources, such as water clarity tubes and transparent velocity head rods (velocity plank), will be available to delegates should they require it.



Delegates must bring appropriate field clothing suitable for working in rivers. Ideally waders, but minimally gumboots (which are needed if working with SASS), or alternatively river shoes, a change of dry clothing, hat, and sun cream.

## ACCREDITATION

For those people wishing to be re-accredited or for those delegates with previous SASS5 experience and clearly demonstrating adequate competency during the training, an accreditation day will be made available at an extra cost to the delegate.

**Date: 2<sup>nd</sup> September 2016**

**Cost: an additional cost of R750 (excluding VAT).**

**Information regarding time and venue will be provided.**

## BOOKINGS

Interested delegates should complete the attached application form and email it to [admin@groundtruth.co.za](mailto:admin@groundtruth.co.za), or alternatively fax it to 086 599 2300, by no later than 19<sup>th</sup> August 2016.

Any delegates wishing to cancel their bookings, without a minimum of 14 days notice, are liable for a 50% cancellation fee.

## ACCOMMODATION

Delegates must arrange their **own accommodation as well as getting themselves to the training venue.**

**Accommodation options include the following:**

- African Enterprise

[http://ae-centre.co.za/html/rooms\\_and\\_rates.html](http://ae-centre.co.za/html/rooms_and_rates.html)

- Fountains B&B

<http://www.safarinow.com/go/fountainsbnbmontrose/>

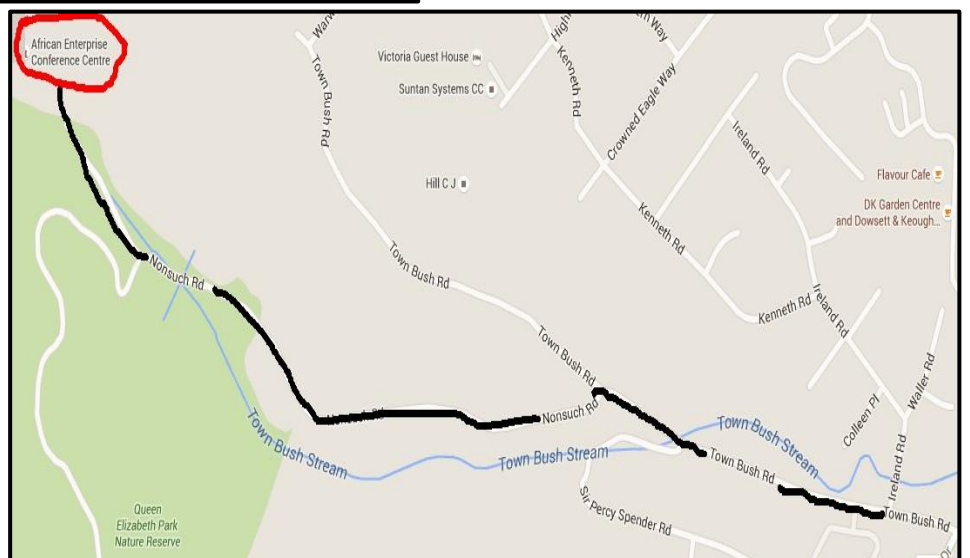
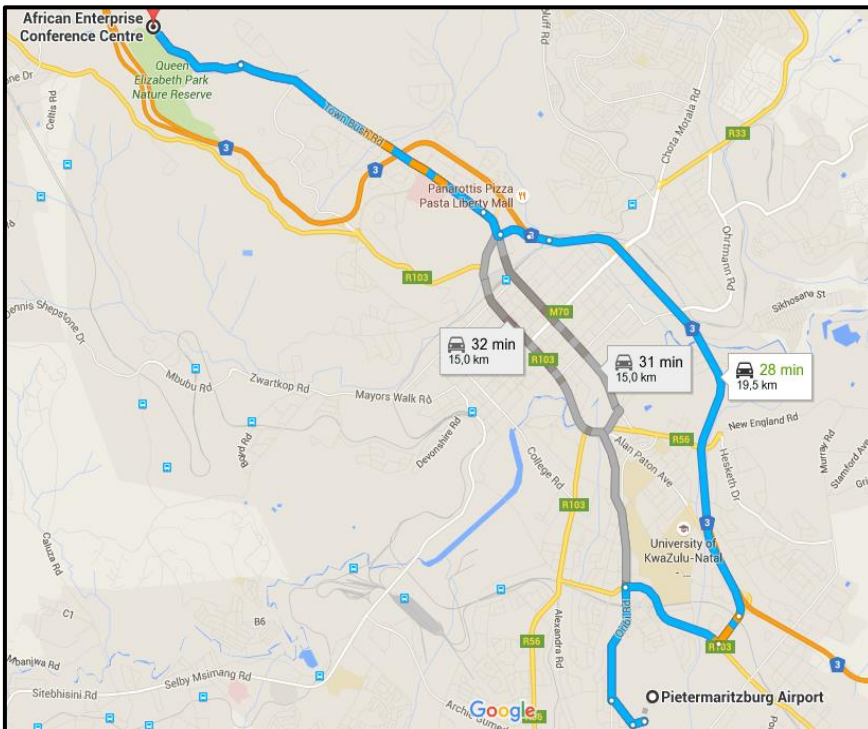
Please note that GroundTruth reserves the right to cancel this course should there be insufficient numbers.

# DIRECTIONS FROM AIRPORT TO VENUE

From: Pietermaritzburg Airport (29° 38' 32.37" S; 30° 23' 36.08" E)

To: Africa Enterprise conference venue (29° 19' 34.20" S; 30° 19' 11.55" E)

- (1) On exiting the airport, turn right onto Oribi Rd.
- (2) At the robot, turn right onto Washington Rd/R103
- (3) Turn left at the next robot onto Market Rd.
- (4) Merge onto the N3 via the ramp to Harrismith.
- (5) After about 7 km, take exit 82 (Pietermaritzburg) for Armitage Road towards Sanctuary Road.
- (6) At the roundabout, take the 1<sup>st</sup> exit onto Armitage Rd.
- (7) At the next roundabout, take the 3<sup>rd</sup> exit onto Chatterton Rd.
- (8) Continue onto Town Bush Rd for about 4.5 km.
- (9) Turn left onto Nonsuch Rd.
- (10) Follow the narrow until you reach the African Enterprise entrance





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## **SASS5 AQUATIC BIOMONITORING TRAINING COURSE BOOKING FORM**

Name of Delegate : \_\_\_\_\_  
Company : \_\_\_\_\_  
Postal Address : \_\_\_\_\_  
\_\_\_\_\_  
Telephone Number : \_\_\_\_\_  
Email Address : \_\_\_\_\_  
Fax Number : \_\_\_\_\_  
Company Vat Number : \_\_\_\_\_  
Purchase Order Number : \_\_\_\_\_

\_\_\_\_\_  
Signature of Delegate

\_\_\_\_\_  
Date

### **SECTION TO BE COMPLETED BY PERSON RESPONSIBLE FOR PAYMENT**

Name : \_\_\_\_\_  
Postal Address : \_\_\_\_\_  
\_\_\_\_\_  
Telephone Number : \_\_\_\_\_  
Email Address : \_\_\_\_\_

**Placement on the course will not be confirmed until such a time as we receive proof of payment or a copy of a purchase order.**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date